

## DAKOTA GASIFICATION COMPANY

A BASIN ELECTRIC SUBSIDIARY

**MAILING ADDRESS:**

P.O. BOX 5540  
BISMARCK, NORTH DAKOTA 58506-5540  
PHONE: 701/221-4400 FAX: 701/221-4450

**STREET ADDRESS:**

SUITE ONE  
1600 EAST INTERSTATE AVENUE  
BISMARCK, NORTH DAKOTA 58503-0561



September 7, 2001

Mr. Terry O'Clair  
Director, Division of Air Quality  
North Dakota Department of Health  
1200 Missouri Ave.  
P.O. Box 5520  
Bismarck, ND 58504-5264



**Re: Response to July 11, 2001 Letter Regarding  
Class I Increment Modeling**

Dear Mr. O'Clair:

This letter responds to the North Dakota Department of Health (**Department**) letter of July 11, 2001, to Mr. Ron Harper of Dakota Gasification Company (**DGC**), inviting comments on the Department's plans to model SO<sub>2</sub> increment consumption in Class I areas, and the intent of the Department to treat all emissions from DGC's Great Plains Synfuels Plant as Class I increment consuming. DGC respectfully offers the following comments.

The variance granted in 1993 for a major modification of the synfuels plant was then and continues to be valid. The modification is exempt from the requirement that it not cause or contribute to a Class I increment exceedance. Because the major modification is exempt from this requirement, it is also exempt from modeling intended to test compliance with the requirement.

Given the precedent of how Class I impacts have been addressed in North Dakota over the past two decades and the absence of any empirical evidence of adverse effects on air quality related values (**AQRVs**) in Class I areas, there does not appear to be any justification for modeling SO<sub>2</sub> impacts on those Class I areas at this time.

### **I. Overview of Class I Increments and Variances**

The Prevention of Significant Deterioration (**PSD**) increments for sulfur dioxide were first defined in the Clean Air Act Amendments of 1977 (Pub.L. 95-95). These increments work in tandem with "air quality-related values" (**AQRVs**). Federal Land Managers (**FLMs**) have a responsibility to protect AQRVs in Class I areas and to consider, in consultation with the Environmental Protection Agency (**EPA**), whether any proposed major source or major modification will have an adverse impact on such values. Clean Air Act § 165(d)(2)(B), 42 U.S.C. § 7475(d)(2)(B).

Class I increments provide a means for protecting AQRVs, and a method to determine who has the burden of proof as to whether or not a proposed project

Mr. Terry O'Clair  
Director, Division of Air Quality  
September 7, 2001  
Page 2

will adversely impact AQRVs. If the FLM demonstrates to the satisfaction of the State that the proposed source will have an adverse impact on AQRVs, a permit will not be issued even if the Class I increment is not exceeded. If the FLM makes the determination that the source will not have an adverse impact on AQRVs, a permit may be issued even if the Class I increment is exceeded. Clean Air Act § 165(d)(2)(C), 42 U.S.C. § 7475(d)(2)(C); NDAC § 33-15-15-01.4.j. This latter situation is referred to as a "variance" in EPA regulations. 40 CFR § 51.166(p)(4); see also NDAC § 33-15-15-01.4.j (4).

The Class I increments and AQRVs are intended "to provide additional protection for air quality in areas where the Federal Government has a special stewardship to protect the natural values of a national resource. Such areas are the federally-owned Class I areas under the [Clean Air Act]." S.Rep. 95-127, 95<sup>th</sup> Cong. 1<sup>st</sup> Sess., at 34 (May 10, 1977). It is AQRVs, however, which have primacy in decisions regarding the protection of Class I areas. The Class I increments were described by Congress as "a flexible test . . . for determining where the burden of proof lies and is an index of changes in air quality. It is not the final determinant for approval or disapproval of the permit application." *Id.*, at 35. "[T]he term 'air quality related values' of Federal lands designated as Class I areas includes the fundamental purposes for which such lands have been established and preserved by the Congress and the responsible Federal agency. For example, under the 1916 Organic Act to establish the National Park Service (16 U.S.C. Section 1), the purpose of such national park lands 'is to conserve the scenery and the natural historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.'" *Id.*, at 36.

Additional legislative history reinforces the primacy of AQRVs. See, comments of Senator Muskie, Congressional Record, Vol. 123, p. 18464: "Even if technically there may be a violation of the Class I increments within the park area, the people who propose to build a plant can apply for consideration of the application for a permit on the basis that the damage would be to air quality values nonexistent (sic). So there is opportunity and some flexibility even close to some of these Class I areas which the bill seeks to protect. . . . Obviously if we set Federal standards there is some responsibility at the Federal level. The Federal decision makers are also bound to consider the provisions for flexibility which are written into the statute, and we would expect them to be so bound."

As provided in the Clean Air Act and the legislative history, the principal mandate in Class I areas is to protect AQRVs, not the Class I increments. The Class I increment is a means to an end--the protection of AQRVs. Class I increments are not inflexible standards that must be met in all cases; rather, they are a starting point which determines where the burden of proof lies. If an increment is met, the FLM must convince the State that AQRVs are adversely impacted to justify denial of a permit, whereas, if an increment is not met, the

Mr. Terry O'Clair  
Director, Division of Air Quality  
September 7, 2001  
Page 3

source must convince the FLM that AQRVs are not adversely impacted for a permit to be granted. In both cases, the ultimate determinant is AQRVs.

## **II. Analysis of EPA's Recently Announced Position Regarding Treatment of PSD Variances in North Dakota**

In North Dakota, there have been a series of variances granted for projects which modeling predicted would result in increments in Class I areas being exceeded, but which were found by the FLM not to have an adverse impact on AQRVs. Despite these variances, EPA Region 8 recently has stated, for the first time, that, notwithstanding the statutory provision for variances, "the State is still required to correct the Class I increment violation through a revision to the SIP in accordance with the requirements of 40 CFR 51.166(a)(3)." Draft Technical Support Document for 2000 North Dakota SIP call, at 10; *see also*, Letter of February 1, 2000 from Richard Long, EPA Region 8 to Jeffrey Burgess of the Department.

Essentially, EPA asserts that a variance is not a variance. EPA's position is inconsistent with the statute, with its own long-standing practice, and erroneously interprets the Clean Air Act.

First, EPA may make a State Implementation Plan (SIP) call only if there is a finding that a SIP "is substantially inadequate to . . . comply with any requirement of this chapter . . ." Clean Air Act, Section 110(k)(5), 42 U.S.C. §7410(k)(5). However, where a variance is granted, there is no failure to comply with any requirement of the Act. The modeled increment violation has been excused because there is no adverse impact on AQRVs, and thus there is no event of noncompliance to be corrected by a SIP call. This is corroborated by Section 165(d)(2)(C)(iv) of the Clean Air Act, 42 U.S.C. § 7475(d)(2)(C)(iv), which states that when a variance is granted for a Class I increment exceedance, the variance source becomes subject to an alternative maximum allowable increase in ambient pollutant concentration. *See also*, NDAC § 33-15-15-01.4.j(4)(b). This is an explicit recognition that facilities which have been granted variances are subject to the alternative maximums, not to Class I increments. Thus, for variance facilities, SIPs need only contain provisions assuring they do not contribute to the alternative maximum. Under the express terms of the statute, such facilities are exempt from compliance with Class I increments, and thus should not be subjected to modeling which tests compliance with those increments.

Second, Region 8's position, if valid, would effectively nullify the variance provisions of Section 165(d) from the Clean Air Act. If every time a variance was granted the State had to make a SIP change to eliminate the modeled increment exceedance, the variance would be meaningless. The SIP change would cure the exceedance, making the variance moot. Under EPA's interpretation, a variance, at most, would be a temporary device to allow a project to go forward while awaiting a SIP revision. But if variances were

Mr. Terry O'Clair  
Director, Division of Air Quality  
September 7, 2001  
Page 4

intended to be temporary only, Congress would have so provided. It did not. EPA cannot, by means of a new interpretation, amend the Clean Air Act.

Third, EPA's position would make the Class I increments the ultimate determining factor, whereas the statutory scheme and legislative history make it clear that AQRVs are the determinative factor. EPA fails to acknowledge that, in the absence of an adverse impact on AQRVs, there is no underlying reason to be concerned about the modeled status of a Class I increment. The increment is a means to an end, the starting point which defines the burden of proof concerning AQRVs; it is not the "final determinant".

Fourth, EPA's long-standing practice contradicts its newly-announced interpretation.

The only authority Region 8 cites in support of its position is the case of *Alabama Power v. Costle*, 636 F.2d 323, 363 (D.C. Cir. 1979). In that case, industry petitioners argued against the provision in EPA's regulations which authorized the agency to make SIP calls based on increment violations. Industry argued that the PSD permitting program was the exclusive mechanism for protecting increments, but the court rejected the argument. Numerous events might contribute to increment exceedances, but might not be subject to PSD permitting, and therefore, said the court, SIP calls are warranted to address increment violations. One of industry's arguments was that the statute provides for waivers of Class I increments which, conceivably, "could allow increments to be exceeded." The court responded that "[t]he waiver has vitality and recognition in that facilities granted special consideration under these provisions are, in effect, treated as facilities operating in compliance with the provisions of the Act. But the totality of facilities in compliance, as a group, may be subject to measures necessary to cope with a condition of pollutants exceeding the PSD maximum." 636 F.2d at 363. This is the language upon which Region 8 places exclusive reliance.

There are three important points to be made concerning this language. First, it is not mandatory. The court merely said that, where there are waivers (variances), the "totality of facilities" "may" be subject to measures to deal with exceedances of the PSD increment. It did not say that increment exceedances in variance situations "shall" be subject to SIP calls, or when or under what conditions such SIP calls might be warranted. Second, the language is *obiter dicta*, not essential to the court's holding. The court did not have before it a variance situation such as the one in North Dakota, the issues facing North Dakota were not briefed to the court, and therefore the court's tentative statement does not have the force of law. Third, nothing in the court's language says that variances are not valid or that the variance granted to a specific source can be subsequently revoked by means of a SIP call. The court expressly acknowledged that variances granted to sources have "vitality and recognition." At most, although DGC does not concede the point, the court's *dicta* might be read as tentatively authorizing other facilities ("the totality of facilities") to be subjected to a SIP revision. EPA's new

Mr. Terry O'Clair  
Director, Division of Air Quality  
September 7, 2001  
Page 5

interpretation, on the other hand, would deny to variance sources the vitality and recognition afforded by the court.

### **III. EPA's New Interpretation Is Inconsistent with Almost Two Decades of Agency Practice**

EPA's newly-announced interpretation regarding Class I PSD variances is contradicted by an almost twenty-year history of contrary agency practice. EPA cannot now credibly claim that a variance is not a variance. EPA's past actions in North Dakota specifically contradict its current attempt to reverse field.

On September 20, 1982, the Department of the Interior (DOI) published in the Federal Register its certification that five North Dakota proposed sources would not adversely impact AQRVs in Class I areas, despite model predicted exceedances of the 3-hour and 24-hour SO<sub>2</sub> increments in the Theodore Roosevelt National Park (TRNP) North and South Units and the 24-hour increment in the TRNP Elkhorn Ranch unit and the Lostwood Wilderness Area (LWA). 47 FR 41480. In granting a variance for these sources, the DOI noted that the model-predicted exceedances of the increments even if these new sources were not permitted. The worst case estimate of maximum SO<sub>2</sub> concentrations from all sources would affect only two sensitive species of lichen, with minimal impacts on the lichen. A visibility analysis found no significant impact. A field evaluation showed no injury to sensitive species from air pollution. DOI found no adverse effects on AQRVs that would impair ecosystems, impair the quality of visitors' experience, or diminish the national significance of the Class I areas. DOI did not say that, despite the variance, North Dakota would have to revise its SIP to cure the modeled exceedances. Rather, it said that "[n]ew applicants must demonstrate to the Federal Land Manager's satisfaction that the proposed source will not cause or contribute to an adverse impact on the resources of Theodore Roosevelt NP and the wilderness portion of Lostwood NWR." The fact that DOI expected future applicants would have to demonstrate no adverse impacts on Class I areas indicates it did not expect there would be a SIP revision in the meantime which might cure the modeled exceedance and possibly make variances unnecessary.

An EPA guidance memo dated August 23, 1982 commented on these North Dakota variances and predicted that the process followed by the DOI "will in all likelihood serve as a model for future determinations and is consequently worth of note." The guidance memo did not even hint that EPA might require a SIP revision to cure the increment exceedances.

On September 27, 1984, the DOI granted a variance for a proposed natural gas processing facility, despite modeled predictions that the facility would significantly contribute to exceedances of the 24-hour Class I increment for SO<sub>2</sub> in the TRNP North Unit. 49 FR 38197. Pollutant levels were found to be below the threshold values for adverse impacts on sensitive plant and animal

Mr. Terry O'Clair  
Director, Division of Air Quality  
September 7, 2001  
Page 6

species in the park. A field evaluation found no symptoms of visible injury due to ambient air pollution.

On March 12, 1993, the DOI granted a variance for a major modification to the Great Plains Synfuels Plant despite modeled predictions that the modified facility would significantly contribute to exceedances of the 3-hr and 24-hr SO<sub>2</sub> Class I increments at TRNP and the 24-hour increment at LWA NWR. 58 FR 13639. The DOI found that the increase in allowable emissions would not increase visibility impacts; that there was no evidence of existing air quality impacts on biological resources at TRNP or LWA; that air quality in North Dakota had improved since 1984; and that the modification would not cause or contribute to impairment of ecosystems or the quality of visitor experience, or to a diminution of the national significance of the Class I areas. As with the 1982 and 1984 variances, there was no indication that North Dakota was expected to revise its SIP to correct the modeled exceedances of Class I increments.

Thus, on three occasions between 1982 and 1993, modeling predicted exceedances of the Class I SO<sub>2</sub> increments. At no time in the nineteen years since 1982 has there been a whisper from the EPA that North Dakota had to revise its SIP to address these exceedances. EPA's protracted silence during these years is powerful evidence that the agency understood that variances were, indeed, variances--that they were intended by Congress to excuse modeled increment exceedances, not to be temporary dispensations pending SIP revisions. It is powerful evidence that EPA understood that AQRVs, not increments, are the determining factor in Class I areas. It is powerful evidence that EPA understood that when AQRVs are protected there is no rational basis for SIP calls. In light of its long-standing practice, there is no justification for EPA to attempt to invalidate previously granted variances at this time.

**IV. Dakota Gasification Requests the Department to Re-examine  
Whether Further Modeling is Necessary or Appropriate at this Time**

In addition to the particular issue of the validity of the DGC variance, we believe there is a broader, but closely related, issue that would be appropriate for the Department to consider. That issue is whether there is any reasonable need or justification at this time for a SIP revision, or for additional modeling to determine the need for a SIP revision. We submit there is no such justification because: (1) in 1993 it was determined that air pollution was not having a significant adverse effect on AQRVs in North Dakota's Class I areas; (2) monitoring of SO<sub>2</sub> levels in and near Class I areas has not shown any significant increase in SO<sub>2</sub> concentrations or deterioration of air quality since 1993; (3) the lack of adverse impacts on AQRVs in North Dakota's Class I areas has been reaffirmed repeatedly despite the fact that modeling has predicted increment exceedances since 1982; and (4) it is AQRVs, not increments, which are the primary measure and diagnostic determinant of whether air quality is acceptable or unacceptable in Class I areas.

Mr. Terry O'Clair  
Director, Division of Air Quality  
September 7, 2001  
Page 7

In light of these facts and two decades of precedent indicating there is no need for a SIP revision respecting SO<sub>2</sub> levels in Class I areas. Even if modeling were performed and predicted increment exceedances, to pursue a SIP revision based on modeled exceedances would be to ignore the absence of any empirical data indicating that SO<sub>2</sub> concentrations in Class I areas are a problem and to ignore the FLM determination of no adverse impact on the AQRV in the pertinent Class I areas in the state. It is inappropriate for EPA to reinvent its long-standing interpretation and practice respecting this issue.

We thank you for the opportunity to comment, and look forward to hearing from you. We can be available at your convenience to discuss these issues further.

Sincerely,

A handwritten signature in black ink, appearing to read "Deborah F. Levchak", with a stylized flourish at the end.

Deborah F. Levchak  
Staff Counsel

cc: Francis J. Schwindt  
Lyle Whitham